§ 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

## **Amendments**

In the Claims:

Please cancel claims 45, 49, 50, 53-57, 72-75, and 77 without prejudice or disclaimer to the subject matter thereof.

Please substitute the following claims 33, 42, 43, 46, 47, 58, and 76 for pending claims 33, 42, 43, 46, 47, 58, and 76:

33. (Twice Amended) A method of treating a disorder responsive to the induction of apoptosis in an animal suffering therefrom, comprising administering to a mammal in need of such treatment an effective amount of a compound of Formula III:

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or a pharmaceutically acceptable salt or prodrug thereof, wherein

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R<sub>1</sub>-R<sub>7</sub> and R<sub>9</sub>-R<sub>10</sub> are independently hydrogen, halo, haloalkyl, haloalkoxy, aryl, fused aryl, carbocyclic, fused carbocyclic, a heterocyclic group, fused heterocyclic, a heteroaryl group, alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, nitro, aminoalkyl, cyano, cyanoalkyl, acyl, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, alkoxycarbonyl, aryloxy, arylalkoxy, carboxy, carbonylamido, alkylthiol, -NH<sub>2</sub>, -NHR<sub>15</sub> or -NR<sub>15</sub>R<sub>16</sub>, wherein

 $R_{15}$  and  $R_{16}$  are independently optionally substituted  $C_{1-10}$  alkyl, heterocyclic or heteroaryl groups; and

R<sub>11</sub> is hydrogen; or alkyl, cycloalkyl, aryl or heteroaryl, each of which is optionally substituted;

wherein said disorder responsive to the induction of apoptosis is inflammation, inflammatory bowel disease, psoriasis, an autoimmune disease selected from the group consisting of rheumatoid arthritis, multiple sclerosis, diabetes mellitus, Hashimoto's thyroiditis, and autoimmune lymphoproliferative syndrome, or a cancer selected from the group consisting of Hodgkin's disease, non-Hodgkin's lymphoma, acute lymphocytic leukemia, chronic lymphocytic leukemia, multiple myeloma, neuroblastoma, breast carcinoma, ovarian carcinoma, lung carcinoma, Wilms' tumor, cervical carcinoma, testicular carcinoma, soft-tissue sarcoma, primary macroglobulinemia, bladder carcinoma, chronic granulocytic leukemia, primary brain carcinoma, malignant melanoma, small-cell lung carcinoma, stomach carcinoma, colon carcinoma, malignant pancreatic insulinoma, malignant carcinoid carcinoma, choriocarcinoma, mycosis fungoides, head or neck

Pl Cont carcinoma, oesteogenic sarcoma, pancreatic carcinoma, acute granulocytic leukemia, hairy cell leukemia, rhabdomyosarcoma, Kaposi's sarcoma, genitourinary carcinoma, thyroid carcinoma, esophageal carcinoma, malignant hypercalcemia, cervical hyperplasia, renal cell carcinoma, endometrial carcinoma, polycythemia vera, essential thrombocytosis, adrenal cortex carcinoma, skin cancer and prostatic carcinoma; and

wherein said prodrug is:

- a) an ester of a carboxylic acid containing compound of Formula III obtained by condensation with a  $C_{1-4}$  alcohol;
- b) an ester of a hydroxyl group containing compound of Formula III obtained by condensation with a  $C_{1-4}$  carboxylic acid,  $C_{3-6}$  dioic acid or anhydride thereof;
- c) an imine of an arine group containing compound of Formula III obtained by condensation with a  $C_{1-4}$  aldehyde or ketone; or
- d) an acetal or ketal of at least one of the  $R_{1-10}$  hydroxy containing groups obtained by condensation with chloromethyl methyl ether or chloromethyl ethyl ether;

## provided that:

when  $R_{1-2}$  and  $R_{4-11}$  are hydrogen,  $R_3$  is not optionally substituted pyrazolyl;

when R<sub>1-5</sub> are hydrogen, each of R<sub>9</sub> and R<sub>10</sub> is not phenyl;

when  $R_3$  is methoxy and  $R_{5-11}$  are hydrogen, each of  $R_2$  and  $R_4$  is not cyclopentyloxy;

when  $R_{1-3}$  and  $R_{5-11}$  are hydrogen,  $R_4$  is not optionally substituted alkyl;

when  $R_{3-11}$  are hydrogen,  $R_1$  and  $R_2$  are not taken together to form optionally substituted thienyl-1,1-dioxide or partially saturated thienyl-1,1-dioxide; and

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when  $R_1$  and  $R_{4-11}$  are hydrogen,  $R_2$  and  $R_3$  are not taken together to form substituted

pyranyl.

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42. (Twice Amended) A method for treating cancer, comprising administering to an animal in need of such treatment an effective amount of a compound of Formula III:

$$R_{9}$$

$$R_{10}$$

$$R_{6}$$

$$R_{11}$$

$$R_{1}$$

$$R_{2}$$

$$R_{3}$$

$$R_{4}$$

$$R_{10}$$

$$R_{2}$$

$$R_{3}$$

$$R_{4}$$

$$R_{4}$$

$$R_{10}$$

$$R_{2}$$

$$R_{3}$$

$$R_{4}$$

or a pharmaceutically acceptable salt or prodrug thereof, wherein

R<sub>1</sub>-R<sub>7</sub> and R<sub>9</sub>-R<sub>10</sub> are independently hydrogen, halo, haloalkyl, haloalkoxy, aryl, fused aryl, carbocyclic, fused carbocyclic, a heterocyclic group, fused heterocyclic, a heteroaryl group, alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, nitro, aminoalkyl, cyano, cyanoalkyl, acyl, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, alkoxycarbonyl, aryloxy, arylalkoxy, carboxy, carbonylamido or alkylthiol, -NH<sub>2</sub>, -NHR<sub>15</sub> or -NR<sub>15</sub>R<sub>16</sub>, wherein

 $R_{15}$  and  $R_{16}$  are independently optionally substituted  $C_{1510}$  alkyl, heterocyclic or heteroaryl groups; and;

R<sub>11</sub> is hydrogen; or alkyl, cycloalkyl, aryl or heteroaryl, each of which is optionally substituted;

wherein said cancer is selected from the group consisting of Hodgkin's disease, non-Hodgkin's lymphoma, acute lymphocytic leukemia, chronic lymphocytic leukemia, multiple

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myeloma, neuroblastoma, breast carcinoma, ovarian carcinoma, lung carcinoma, Wilms' tumor, cervical carcinoma, testicular carcinoma, soft-tissue sarcoma, primary macroglobulinemia, bladder carcinoma, chronic granulocytic leukemia, primary brain carcinoma, malignant melanoma, small-cell lung carcinoma, stomach carcinoma, colon carcinoma, malignant pancreatic insulinoma, malignant carcinoid carcinoma, choriocarcinoma, mycosis fungoides, head or neck carcinoma, oesteogenic sarcoma, pancreatic carcinoma, acute granulocytic leukemia, hairy cell leukemia, rhabdomyosarcoma, Kaposi's sarcoma, genitourinary carcinoma, thyroid carcinoma, esophageal carcinoma, malignant hypercalcemia, cervical hyperplasia, renal cell carcinoma, endometrial carcinoma, polycythemia vera, essential thrombocytosis, adrenal cortex carcinoma, skin cancer and prostatic carcinoma; and

wherein said prodrug is:

- a) an ester of a carboxylic acid containing compound of Formula III obtained by condensation with a  $C_{1-4}$  alcohol;
- b) an ester of a hydroxyl group containing compound of Formula III obtained by condensation with a C<sub>1-4</sub> carboxylic acid, C<sub>3-6</sub> dioic acid or anhydride thereof;
- c) an imine of an amine group containing compound of Formula III obtained by condensation with a  $C_{1,4}$  aldehyde or ketone; or
- d) an acetal or ketal of at least one of the R<sub>1,10</sub> hydroxy containing groups obtained by condensation with chloromethyl methyl ether or chloromethyl ethyl ether;

provided that:

when  $R_{1-2}$  and  $R_{4-11}$  are hydrogen,  $R_3$  is not optionally substituted pyrazolyl;

when  $R_{1.5}$  are hydrogen, each of  $R_9$  and  $R_{10}$  is not phenyl;

when  $R_3$  is methoxy and  $R_{5-11}$  are hydrogen, each of  $R_2$  and  $R_4$  is not cyclopentyloxy;

when R<sub>1-3</sub> and R<sub>5-11</sub> are hydrogen, R<sub>4</sub> is not alkyl;

when  $R_{3-11}$  are hydrogen,  $R_1$  and  $R_2$  are not taken together to form optionally substituted thienyl-1,1-dioxide or partially saturated thienyl-1,1-dioxide; and

when  $R_1$  and  $R_{4-11}$  are hydrogen,  $R_2$  and  $R_3$  are not taken together to form substituted pyranyl.

43. (Twice Amended) The method of claim 42, wherein said compound is of Formula IV:

or a pharmaceutically acceptable salt or prodrug thereof.

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46. (Twice Amended) A method for the treatment of drug resistant cancer, comprising administering to an animal in need of such treatment an effective amount of a compound of the Formula III:

or a pharmaceutically acceptable salt or prodrug thereof, wherein:

R<sub>1</sub>-R<sub>7</sub> and R<sub>9</sub>-R<sub>10</sub> are independently hydrogen, halo, haloalkyl, haloalkoxy, aryl, fused aryl, carbocyclic, fused carbocyclic, a heterocyclic group, fused heterocyclic, a heteroaryl group, alkyl, alkenyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkyl, heteroarylalkyl, heteroarylalkyl, heterocycloalkyl, hydroxyalkyl, nitro, aminoalkyl, cyano, cyanoalkyl, acyl, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, alkoxycarbonyl, aryloxy, arylalkoxy, carboxy, carbonylamido or alkylthiol, -NH<sub>2</sub>, -NHR<sub>15</sub> or -NR<sub>15</sub>R<sub>16</sub>, wherein

 $R_{15}$  and  $R_{16}$  are independently optionally substituted  $C_{1-10}$  alkyl, heterocyclic or heteroaryl groups; and; and

R<sub>11</sub> is hydrogen; or alkyl, cycloalkyl, aryl or heteroaryl, each of which is optionally substituted;

wherein said-drug resistant cancer is selected from the group-consisting-of Hodgkin's disease, non-Hodgkin's lymphoma, acute lymphocytic leukemia, chronic lymphocytic leukemia, multiple myeloma, neuroblastoma, breast carcinoma, ovarian carcinoma, lung carcinoma, Wilms' tumor, cervical carcinoma, testicular carcinoma, soft-tissue sarcoma, primary macroglobulinemia, bladder carcinoma, chronic granulocytic leukemia, primary brain carcinoma, malignant melanoma, small-cell lung carcinoma, stomach carcinoma, colon

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carcinoma, malignant pancreatic insulinoma, malignant carcinoid carcinoma, choriocarcinoma, mycosis fungoides, head or neck carcinoma, oesteogenic sarcoma, pancreatic carcinoma, acute granulocytic leukemia, hairy cell leukemia, rhabdomyosarcoma, Kaposi's sarcoma, genitourinary carcinoma, thyroid carcinoma, esophageal carcinoma, malignant hypercalcemia, cervical hyperplasia, renal cell carcinoma, endometrial carcinoma, polycythemia vera, essential thrombocytosis, adrenal cortex carcinoma, skin cancer and prostatic carcinoma; and

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wherein said prodrug is:

- a) an ester of a carboxylic acid containing compound of Formula III obtained by condensation with a  $C_{1-4}$  alcohol;
- b) an ester of a hydroxyl group containing compound of Formula III obtained by condensation with a  $C_{1-4}$  carboxylic acid,  $C_{3-6}$  dioic acid or anhydride thereof;
- c) an imine of an amine group containing compound of Formula III obtained by condensation with a  $C_{1-4}$  aldehyde or ketone; or
- d) an acetal or ketal of at least one of the R<sub>1-10</sub> hydroxy containing groups obtained by condensation with chloromethyl methyl ether or chloromethyl ethyl ether;

provided that:

when  $R_{1-2}$  and  $R_{4-11}$  are hydrogen,  $R_3$  is not optionally substituted pyrazolyl; when  $R_{1-5}$  are hydrogen, each of  $R_9$  and  $R_{10}$  is not phenyl; when  $R_3$  is methoxy and  $R_{5-11}$  are hydrogen, each of  $R_2$  and  $R_4$  is not cyclopentyloxy; when  $R_{1-3}$  and  $R_{5-11}$  are hydrogen,  $R_4$  is not alkyl;

when  $R_{3-11}$  are hydrogen,  $R_1$  and  $R_2$  are not taken together to form optionally substituted thienyl-1,1-dioxide or partially saturated thienyl-1,1-dioxide; and

when  $R_1$  and  $R_{4-11}$  are hydrogen,  $R_2$  and  $R_3$  are not taken together to form substituted pyranyl.

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47. (Twice Amended) The method of claim 46, wherein said compound is of

Formula IV:

$$R_9$$
 $N$ 
 $NO_2$ 
 $R_3$ 
 $(IV)$ 

or a pharmaceutically acceptable salt or prodrug thereof.

58. (Twice Amended) A compound of Formula III:

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or a pharmaceutically acceptable salt or prodrug thereof, wherein

R<sub>1</sub> and R<sub>5</sub> are independently selected from the group consisting of hydrogen, hydroxy, alkyl, alkoxy, halogen, NO<sub>2</sub>, cyano, haloalkyl, haloalkoxy, amino and aminoalkyl,

provided that at least one of  $R_1$  and  $R_5$  is selected from the group consisting of  $NO_2$ , cyano, alkyl and haloalkyl;

 $R_2$  and  $R_4$  are independently selected from the group consisting of hydrogen, hydroxy, halogen cyano, haloalkyl, haloalkoxy, amino and aminoalkyl;

R<sub>3</sub> is alkyl, Cl, F, haloalkyl, alkoxy, arylalkoxy, cyano, haloalkyloxy, amino or aminoalkyl;

R<sub>6</sub> is hydrogen, hydroxy, alkyl, NO<sub>2</sub>, cyano, haloalkyl, haloalkyloxy, amino or aminoalkyl;

R<sub>7</sub> is hydrogen, hydroxy, alkyl, NO<sub>2</sub>, cyano, haloalkyl, haloalkyloxy, amino or aminoalkyl;

R<sub>9</sub> is hydroxy, alkyl, halogen, NO<sub>2</sub>, haloalkyl, alkoxy, cyano, haloalkyloxy, amino or aminoalkyl;

R<sub>10</sub> is hydrogen, hydroxy, alkyl, Cl, F, NO<sub>2</sub>, cyano, haloalkyl, haloalkyloxy, amino or aminoalkyl; and

R<sub>11</sub> is hydrogen, alkyl or haloalkyl;

wherein said prodrug is:

- a) an ester of a carboxylic acid containing compound of Formula III obtained by condensation with a C<sub>1-1</sub>alcohol;
- b) an ester of a hydroxyl group containing compound of Formula III obtained by condensation with a  $C_{1-4}$  carboxylic acid,  $C_{3-6}$  dioic acid or anhydride thereof;
- c) an imine of an amine group containing compound of Formula III obtained by condensation with a  $C_{1-4}$  aldehyde or ketone; or

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By Cont d) an acetal or ketal of at least one of the  $R_{1-10}$  hydroxy containing groups obtained by condensation with chloromethyl methyl ether or chloromethyl ethyl ether;

provided that when  $R_2$  and  $R_4$  are hydrogen and each of  $R_9$  and  $R_{10}$  is halo,  $R_1$  and  $R_3$  are not both alkyl.

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Once Amended) The method of any one of claims 33, 42, and 46 wherein optional substituents on the alkyl or heteroaryl group of  $R_{15}$  and  $R_{16}$  or the alkyl, aryl, or heteroaryl group of  $R_{11}$  include one or more halo,  $C_1$ - $C_6$  haloalkyl,  $C_6$ - $C_{10}$  aryl,  $C_4$ - $C_7$  cycloalkyl,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl,  $C_6$ - $C_{10}$  aryl( $C_1$ - $C_6$ ) alkyl,  $C_6$ - $C_{10}$  aryl( $C_2$ - $C_6$ ) alkynyl,  $C_1$ - $C_6$  hydroxyalkyl, nitro, amino, ureido, cyano,  $C_1$ - $C_6$  acylamino, hydroxy, thiol,  $C_1$ - $C_6$  acyloxy, azido,  $C_1$ - $C_6$  alkoxy or carboxy.